

**UNITED STATES DEPARTMENT OF COMMERCE****United States Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/206, 027	12/04/98	COHEN	B AMAT/3049/MD

IM52/0827

APPLIED MATERIALS INC  
PATENT COUNSEL  
P O BOX 450 A  
SANTA CLARA CA 95052

EXAMINER

VINH, L

ART UNIT

PAPER NUMBER

1765

*17*

DATE MAILED: 08/27/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

**Advisory Action**

Application No. 09/206,027	Applicant(s) Cohen et al.
Examiner Lan Vinh	Art Unit 1765

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

THE REPLY FILED 8/17/01 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

Therefore, further action by the applicant is required to avoid the abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**THE PERIOD FOR REPLY [check only a) or b)]**

a)  The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.

b)  In view of the early submission of the proposed reply (within two months as set forth in MPEP § 706.07 (f)), the period for reply expires on the mailing date of this Advisory Action, OR continues to run from the mailing date of the final rejection, whichever is later. In no event, however, will the statutory period for the reply expire later than SIX MONTHS from the mailing date of the final rejection.

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1.  A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2.  The proposed amendment(s) will be entered upon the timely submission of a Notice of Appeal and Appeal Brief with requisite fees.
3.  The proposed amendment(s) will not be entered because:
  - (a)  they raise new issues that would require further consideration and/or search. (See NOTE below);
  - (b)  they raise the issue of new matter. (See NOTE below);
  - (c)  they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d)  they present additional claims without cancelling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

4.  Applicant's reply has overcome the following rejection(s):  
\_\_\_\_\_  
\_\_\_\_\_

5.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in separate, timely filed amendment cancelling the non-allowable claim(s).

6.  The a)  affidavit, b)  exhibit, or c)  request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See attachment  
\_\_\_\_\_

7.  The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

8.  For purposes of Appeal, the status of the claim(s) is as follows (see attached written explanation, if any):

Claim(s) allowed: None

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: 1, 3-8, and 10-30

9.  The proposed drawing correction filed on \_\_\_\_\_ a)  has b)  has not been approved by the Examiner.

10.  Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_

11.  Other:

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***Response to Arguments***

1. Applicant's arguments filed on 8/17/2001 have been fully considered but they are not persuasive.

In traversing the examiner rejection, the applicants argue that Konecni does not teach a plasma generated from a gas mixture consisting of argon, helium and hydrogen wherein the gas mixture comprises less than about 75% by volume of argon because as recited in col. 3, lines 55-59 of Konecni, Konecni teaches a plasma generated from a gas comprising 80% by volume of argon. The examiner disagrees because upon reviewing col 3, lines 55-59 in Konecni, the examiner recognizes that although Konecni teaches a plasma generated from a gas comprising 80% by volume of argon, Konecni also clearly states that 80% by volume of argon is contained in a gas mixture described in only one embodiment, since Konecni further discloses that his invention contemplates any suitable flow rates for the argon, hydrogen, helium ( col 3, line 58 ), it is the examiner's position that one skilled in the art would have found it obvious to adjust the flow rate of argon to achieve any suitable flow rates in other embodiments.

It is also argued that the examiner erroneously read into the reference of Jen (5,773367) that the helium flow rate was increased during the oxide removal process. The examiner disagrees because although fig. 7A of Jen shows a decrease in oxide etch rate as the helium increases from 90-100 sccm as pointed out by the applicants, in other embodiment, fig. 7A also clearly shows an increase in oxide etch rate as the flow rate of helium increases from 100-110 sccm. Based on what

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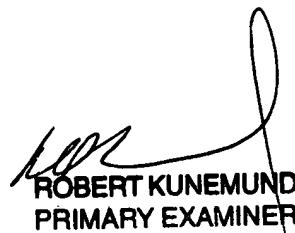
is taught by fig. 7A of Jen, the examiner asserts that Jen teaches increasing the helium content of the plasma to increase etching rate.

***Conclusion***

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Vinh whose telephone number is (703) 305-6302. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Benjamin Utech, can be reached on (703) 308-3836. The official fax number for the organization is (703) 305-3599.

LV

August 23, 2001



ROBERT KUNEMUND  
PRIMARY EXAMINER